IN THE CLAIMS:

1. (Previously Presented) A method for depositing a low dielectric constant film, comprising:

delivering a gas mixture comprising:

a cyclic organosiloxane; and

two or more oxidizing gases comprising N_2O and O_2 to a substrate in a chamber, wherein a ratio of a flow rate of the N_2O to a total flow rate of the two or more oxidizing gases into the chamber is between about 0.1 and about 0.5;

applying RF power to the gas mixture at conditions sufficient to deposit a low dielectric constant film on a surface of the substrate; and

controlling a carbon content of the low dielectric constant film at between about 5 and about 30 atomic percent.

2. (Original) The method of claim 1, wherein the two or more oxidizing gases consist of N_2O and O_2.

3. (Original) The method of claim 1, wherein the cyclic organosiloxane is octamethylcyclotetrasiloxane (OMCTS).

4. (Original) The method of claim 1, wherein cyclic organosiloxane is selected from the group consisting of 1,3,5-trimethylcyclotrisiloxane, hexamethylcyclotrisiloxane, 1,3,5,7-tetramethylcyclotetrasiloxane (TMCTS), octamethylcyclotetrasiloxane (OMCTS), 1,3,5,7,9-pentamethylcyclopentasiloxane, and decamethylcyclopentasiloxane.

5. (Original) The method of claim 4, wherein the gas mixture further comprises an inert gas selected from the group consisting of helium, argon, and combinations thereof.

6. (Original) The method of claim 1, further comprising post-treating the low dielectric constant film with an electron beam.

7. (Previously Presented) A method for depositing a low dielectric constant film, comprising:

delivering a gas mixture comprising:

a cyclic organosiloxane; and

an oxidizing gas consisting essentially of a N_2O and a O_2 gas to a substrate in a chamber, wherein the N_2O is delivered into the chamber at a flow rate between about 0.71 sccm/cm^2 and about 1.42 sccm/cm^2 of substrate surface, wherein a ratio of flow rate of N_2O to a total flow rate of the N_2O and the O_2 gas is between about 0.1 and about 0.5;

applying RF power to the gas mixture at conditions sufficient to deposit a low dielectric constant film having a carbon content between about 5 and about 30 atomic percent on a surface of the substrate.

8. (Cancelled)

9. (Original) The method of claim 7, wherein the gas mixture further comprises a linear hydrocarbon.

10. (Original) The method of claim 9, wherein the linear hydrocarbon is ethylene.

11. (Original) The method of claim 7, wherein the cyclic organosiloxane is octamethylcyclotetrasiloxane (OMCTS).

12. (Original) The method of claim 7, wherein the cyclic organosiloxane is selected from the group consisting of 1,3,5-trimethylcyclotrisiloxane, hexamethylcyclotrisiloxane, 1,3,5,7-tetramethylcyclotetrasiloxane (TMCTS), octamethylcyclotetrasiloxane (OMCTS), 1,3,5,7,9-pentamethylcyclopentasiloxane, and decamethylcyclopentasiloxane.

13. (Original) The method of claim 7, wherein the gas mixture further comprises an inert gas selected from the group consisting of helium, argon, and combinations thereof.

14. (Original) The method of claim 7, further comprising post-treating the low dielectric constant film with an electron beam.

15-20. (Cancelled)